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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,171

12/21/2005

Francis Anthony Darmann

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EXAMINER

WILLOUGHBY, TERRENCE RONIQUE

ART UNIT

PAPER NUMBER

2836

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,171	<b>Applicant(s)</b> DARMANN, FRANCIS ANTHONY	
	<b>Examiner</b> TERRENCE R. WILLOUGHBY	<b>Art Unit</b> 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15 is/are allowed.
- 6) ☒ Claim(s) 16-18 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/6/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

Applicant's amended filed on August 6, 2008 has been entered. Accordingly Claims 12, 16-17 and 19 have been amended and no Claims have been cancelled. Claims 13-15 and 18 were previously presented. Therefore, Claims 12-19 remain pending in this application. It also included remarks/arguments.

### ***Drawings***

The objections to the drawings figures are withdrawn based on the amendment and remarks filed.

### ***Specification***

The objections to the specification are withdrawn based on the amendment and remarks filed.

### ***Claim Rejections - 35 USC § 112***

The 112 rejections are withdrawn based on the amendment and remarks filed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by P.D. Van, et al. (Hereinafter "Van") (FR (2,621,749).

Regarding claim 16, Van discloses in (Fig. 2), a method of current limiting faults in an electrical network, comprising the steps of:

Utilizing a fault current limiter (15) between the electrical network and ground for simultaneous neutral faults on a neutral line and utilizing fault current limiters (152, 153) simultaneous for phase line to phase line faults (21, 30). See pages 5, paragraphs 1-5 and page 6, paragraphs 5-7 and page 7, paragraphs 1-2 and page 8, paragraphs 5-6 and page 9, paragraph 1-4.

Regarding claim 17, Van discloses a method of current limiting faults in a multi-phase electrical network, comprising the steps of:

Coupling a superconductive phase fault current limiter (152, 153) between each phase (20, 30) of the electrical network and a transformer(T) for fault current limiting of phase line to phase line faults; coupling a superconductive neutral fault current limiter (15) between the neutral of the transformer and the neutral of the network for fault current limiting of neutral faults on a neutral line. See pages 5, paragraphs 1-5 and page 6, paragraphs 5-7 and page 7, paragraphs 1-2 and page 8, paragraphs 5-6 and page 9, paragraph 1-4.

Claim 18 rejected under 35 U.S.C. 103(a) as being unpatentable over P.D. Van, et al. (Hereinafter "Van") (FR (2,621,749) in view of Metra (US 6,049,036).

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Regarding claim 18, Van in (Fig. 2) discloses the method as claimed in claim 17, wherein the superconductive phase fault current limiters (152, 153) and the superconductor neutral fault current limiter (15) comprising a cryostat (16, 162, 163). See page 2, paragraph 4.

Van does not explicit disclose that the superconductive phase and neutral fault current limiters share the same cryostat.

Metra discloses in (Fig. 1), a superconductor phase fault current limiter (2) and a superconductive neutral current limiter (4) sharing the same cryostat (6, 7).

It would have been obvious to one of ordinary skill in the art at the time the invention to have modified the superconductor fault current limiter of Van and make the superconductive phase and neutral fault current limiters share the same cryostat as taught by Metra, in order to for keep the superconductor components at a desired temperature and also to reduce the effects of resistive losses based on the cross-sectional area of the conductors.

### ***Allowable Subject Matter***

Claims 12-15 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 12, the prior of record fails to teach or suggest a series of neutral coils located adjacent the superconductive coil for fault current limiting neutral faults in the electrical network in combination with other limitations recited in the claims.

Claims 14-15 are also allowable because the claims are dependent upon base claim 12.

Claim 19 is objected to as being dependent upon a rejected base claim 17, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 19 would be allowable over the prior art of record because the prior art does not teach or suggest the superconductive phase fault current limiters and the superconductive neutral fault current limiter share the same superconductive coil thereby allowing a single superconducting coil to magnetize the common core as set forth in the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

Applicant's arguments with respect to claims 12-19 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERRENCE R. WILLOUGHBY whose telephone number is (571)272-2725. The examiner can normally be reached on 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on 571-272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terrence R Willoughby/  
Examiner, Art Unit 2836  
1/31/09

/Stephen W Jackson/  
Primary Examiner, Art Unit 2836